

Claims:

1. A Mass Viewer Audience Response Detection (MVAR) gateway for providing real time feedback to an interactive application displayed live on at least one display screen together with at least one callback telephone number for enabling members of a mass viewer audience watching the interactive application and calling a callback telephone number of the at least one callback telephone number to actively participate therein, the MVAR gateway comprising a controller for controlling at least one digital telephony interface board to establish inbound half duplex line connections with callers' telephones on receiving circuit based telephone calls therefrom for determining callers' DTMF key depressions corresponding to their real time responses to the interactive application, and transmitting real time information regarding callers' responses for providing real time feedback to the mass viewer audience watching the interactive application, and particularly the callers continuously holding their telephones like a hand held TV remote control and depressing the DTMF keys on their telephones to input their responses to actively participate therein without interrupting their participation to listen to pre-recorded playback messages regarding DTMF key assignments.

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2. The gateway according to Claim 1 constituted by a circuit based MVAR gateway including at least one call control type digital telephony interface board for establishing said inbound half duplex line connections and detecting callers' DTMF key depressions.

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3. The gateway according to Claim 1 constituted by a transaction based MVAR gateway for deployment as a Service Control Point (SCP) in an Intelligent Network (IN), said transaction based MVAR gateway including at least one transaction type digital telephony interface board supporting Single Ended Calls and Mid-Call Interruption features for establishing said inbound

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half duplex line connections and issuing queries for determining callers' DTMF key depressions.

4. The gateway according to Claim 3 wherein said transaction based
5 MVAR gateway is a standalone SCP.

5. The gateway according to Claim 3 wherein said transaction based
MVAR gateway is an open standard SCP.

10 6. A communication platform for enabling mass viewer audience circuit
based real time participation in an interactive application displayed live on at least
one display screen, the platform comprising:

(a) an application server for providing real time feedback to an interactive
application displayed live on at least one display screen together with at least one
15 callback telephone number for enabling members of a mass viewer audience
watching the interactive application to call a callback telephone number of the at
least one callback telephone number to actively participate therein; and

(b) a Mass Viewer Audience Response Detection (MVAR) gateway on
receiving circuit based telephone calls from callers' telephones, establishing
20 inbound half duplex line connections with callers' telephones for determining
callers' DTMF key depressions corresponding to their real time responses to the
interactive application, and transmitting real time information regarding the
callers' responses to said application server for providing real time feedback to
the mass viewer audience watching the interactive application, and particularly
25 the callers continuously holding their telephones like a hand held TV remote
control and depressing on the DTMF keys on their telephones to input their
responses to actively participate therein without interrupting their participation to
listen to pre-recorded playback messages regarding DTMF key assignments.

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7. The platform according to Claim 6 wherein said MVAR gateway is constituted by a circuit based MVAR gateway including at least one call control type digital telephony interface board for establishing said inbound half duplex line connections and detecting callers' DTMF key depressions.

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8. The platform according to Claim 6 wherein said MVAR gateway is constituted by a transaction based MVAR gateway for deployment as a Service Control Point (SCP) in an Intelligent Network (IN), said transaction based MVAR gateway including at least one transaction type digital telephony interface board supporting Single Ended Calls and Mid-Call Interruption features for establishing said inbound half duplex line connections and issuing queries for determining callers' DTMF key depressions.

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9. The platform according to Claim 8 wherein said transaction based MVAR gateway is a standalone SCP.

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10. The platform according to Claim 8 wherein said transaction based MVAR gateway is an open standard SCP.

11. The platform according to any one of Claims 6 to 10 and further comprising an IVR for selectively playing back pre-recorded playback messages to callers including a welcome playback message confirming that they are participating in the interactive application which they called.

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12. The platform according to Claim 11 wherein said IVR plays back pre-recorded questions to callers whose responses thereto are employed for data processing purposes of their responses to the interactive application.

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13. The platform according to any one of Claims 6 to 12 and further comprising a message server for selectively transmitting visual messages to callers' telephones.

5 14. A method for enabling mass viewer audience circuit based real time participation in an interactive application displayed live on at least one display screen, the method comprising the steps of:

- (a) displaying an interactive application live on at least one display screen together with at least one callback telephone number for enabling members of a
10 mass viewer audience watching the interactive application to call a callback telephone number of the at least one callback telephone number to actively participate therein;
- (b) on receiving circuit based telephone calls from callers' telephones, establishing inbound half duplex line connections with callers' telephones for
15 determining callers' DTMF key depressions corresponding to their real time responses to the interactive application; and
- (c) transmitting real time information regarding callers' responses for providing real time feedback to the mass viewer audience watching the interactive application, and particularly the callers continuously holding their
20 telephones like a hand held TV remote control and depressing the DTMF keys on their telephones to input their responses to actively participate therein without interrupting their participation to listen to pre-recorded playback messages regarding DTMF key assignments.

25 15. The method according to Claim 14 wherein the MVAR gateway is constituted by a circuit based MVAR gateway including at least one call control type digital telephony interface board for establishing the inbound half duplex line connections and detecting callers' DTMF key depressions.

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16. The method according to Claim 14 wherein the MVAR gateway is constituted by a transaction based MVAR gateway for deployment as a Service Control Point (SCP) in an Intelligent Network (IN), said transaction based MVAR gateway including at least one transaction type digital telephony interface board supporting Single Ended Calls and Mid-Call Interruption features for establishing the inbound half duplex line connections and issuing queries for determining callers' DTMF key depressions.
17. The method according to Claim 16 wherein said transaction based MVAR gateway is a standalone SCP.
18. The method according to Claim 16 wherein said transaction based MVAR gateway is an open standard SCP.
19. The method according to any one of Claims 14 to 18 and further comprising the step of selectively playing back pre-recorded playback messages to callers including a welcome playback message confirming that they are participating in the interactive application which they called.
20. The method according to Claim 19 and further comprising the step of playing back pre-recorded questions to callers whose responses thereto are employed for data processing purposes of their responses to the interactive application.
21. The method according to any one of Claims 14 to 20 and further comprising the step of selectively transmitting visual messages to callers' telephones.